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A Manual of Instruction For Packaging Natural Cheese In *Parafilm*

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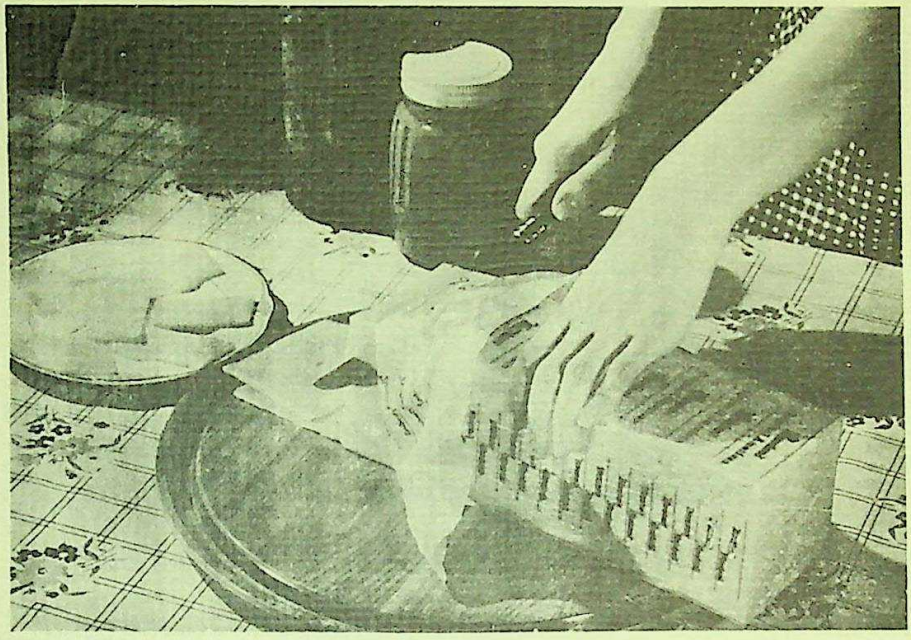

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THE MENASHA PRODUCTS CO. MENASHA WISCONSIN
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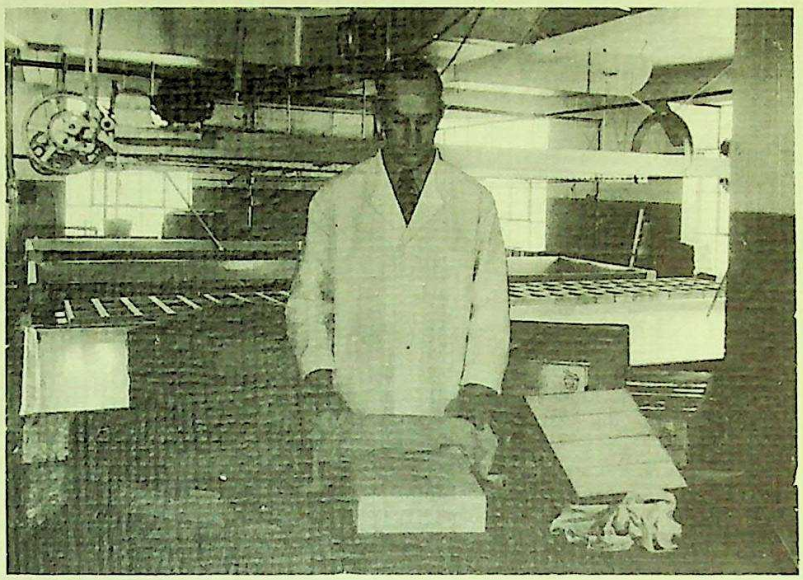

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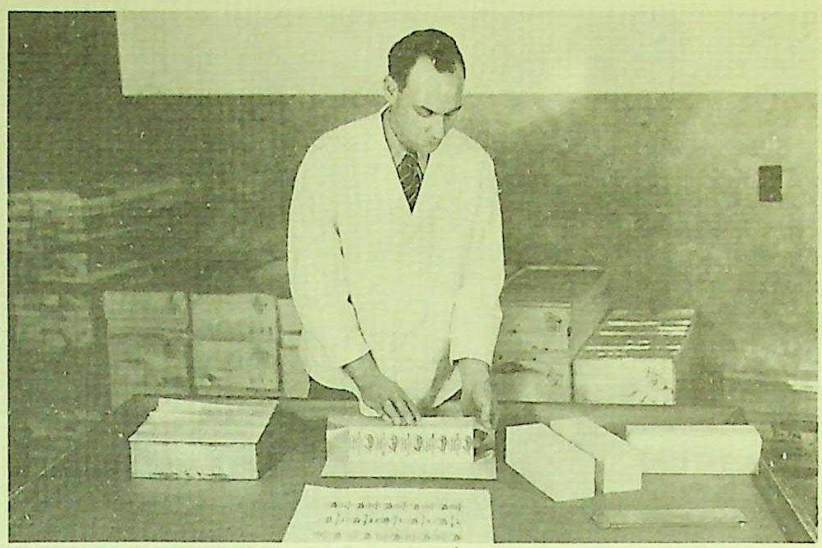

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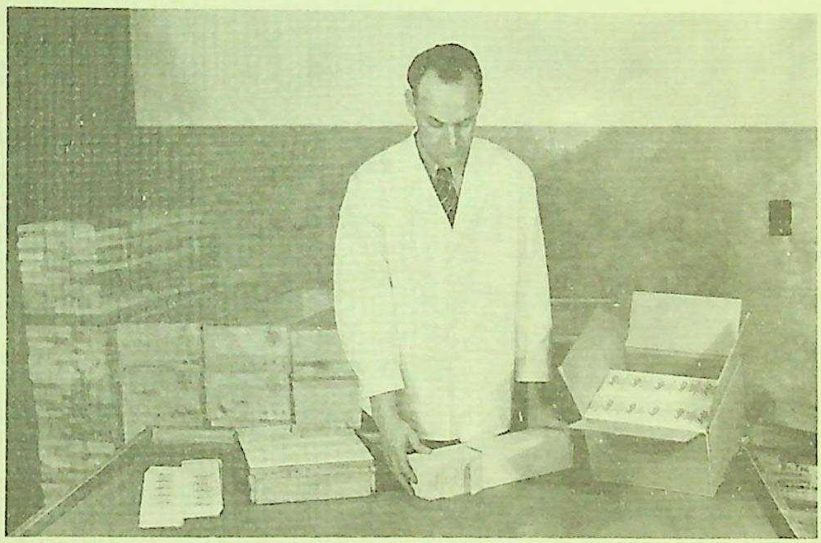

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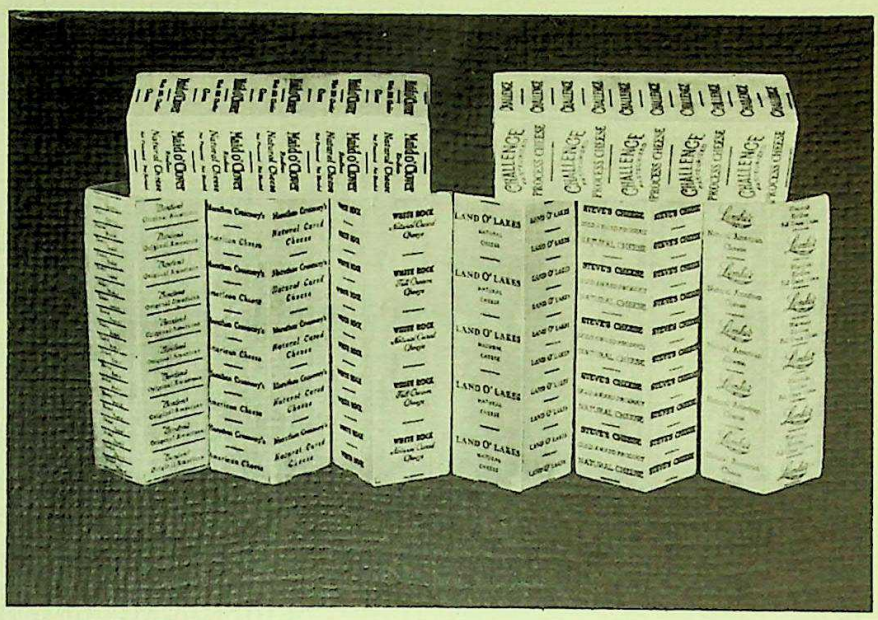
PARAFILM-Packaging has been Successfully Carried on by Small Cheese Factories as well as by Large Units of the Industry. Names of Factories Using the Process will be Furnished on Request.

Parafilm

The Printed PARAFILM Wrapper Identifies and Advertises the Cheese it Protects. . . .



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The PARAFILM-Package Expands Markets and Builds "Repeat" Sales by Establishing and Maintaining Brand Identity. Plain, Unprinted PARAFILM With a Printed MENASHA Carton is Suitable for a Trial Program. Printed PARAFILM with the Printed Carton Insures Doubly Effective Advertising and Identification of Your Product.

A MANUAL FOR PACKAGING NATURAL CHEESE IN PARAFILM

INTRODUCTION

Natural cheese, packaged attractively to meet today's consumer demands, has been the goal of progressive cheese makers and merchandisers for many years. The Menasha Products Company (a division of Marathon Paper Mills Company) has developed a packaging material, PARAFILM, and a method for applying it to natural American cheese. The method has been worked out specifically for 1 lb. and 5 lb. loaf cheese but the basic packaging principles can be used on whatever size may be desired. This unusual material and the process of applying it are now available to all cheese makers.

The function of PARAFILM in the cheese package is to make available an attractive package free from mold, free from rind and retaining almost intact the original moisture content of the cheese. Extensive experience and careful observation prove that PARAFILM in itself has no effect on the quality of the cheese; it does not improve the quality of a poor grade of cheese nor does it lower the quality of an excellent grade. The maker must begin the operation with uniformly good quality cheese if he is to build sound business.

It is the purpose of this Manual to summarize the procedure and to make recommendations drawn from four years of experience. Application of the basic principles given here should result in:

1. Cheese of excellent quality, free of mold, rind and moisture loss. (In 2 to 3 months the PARAFILM package shows moisture loss of one-tenth of one percent.)
2. Increased sales at higher than usual profits because of the attractive, uniform, identified package.

PARAFILM

PARAFILM is a moistureproof, waterproof, flexible film which seals by heat or pressure. In packaging natural cheese, pressure is used to produce the seal aided by a temperature of 80° F. to 100° F. maintained in the cheese.

Certain physical properties of PARAFILM make it imperative that care be exercised in storing, handling and applying it. These cautions are discussed in the last section of this Manual.

EQUIPMENT FOR PACKAGING NATURAL CHEESE IN PARAFILM

Your regular equipment and supply house will provide the simple equipment necessary. To assist your estimate of costs, we list an approximate price for each piece of equipment.

The following equipment is required:

Hoops, 20# size, available new at about $5.50 each. (Used hoops, reconditioned, are sometimes available at reduced prices.)

Knife and Frame for Accurate Cutting, available new at about $6.50

The following equipment is optional and will greatly increase the efficiency of the process:

Scales and Balances. A satisfactory scale with stainless steel platform (approximately $35.00) may be had through any scales manufacturer. Balances may also be purchased from the same source.

Cloths, for pressing, may be made of salt sacks cut to the proper shape.

Table for wrapping the cheese should have a hard, smooth surface, free from splinters. It should measure about three feet wide and ten feet long.

Skid Platforms for storage and shipment can be built in your own plant or supplied by woodworking firms.

Any equipment and supply house will be glad to work with you in supplying equipment listed above. Certain of these items are "custom built" and not stock items. Firms supplying machinery and equipment to the cheese industry will work out supplies exactly suited to your requirements.

CHEESE MANUFACTURING AND WRAPPING

1. MILK. It is essential that the milk used for making PARAFILM-Wrapped Cheese be of the very highest quality. The only way to produce a uniform finished product is to obtain raw material of unvarying quality and this presents the most difficult problem facing the producer of PARAFILM-Wrapped Cheese.

   Because of the fact that it is difficult to obtain milk of uniformly high quality, pasteurization is recommended for most plants. There are a number of methods for pasteurizing milk all of which are quite satisfactory, but it has been found that for the cheese factory operation, the short-time, high temperature method is most suitable. Equipment is now on the market which is very efficient both in regard to the cost of operation and the results obtained.

2. CURD MAKING. An experienced cheese maker is acquainted with the technique of producing a curd of certain qualities. In this discussion, we will point out only those qualities which are desirable for PARAFILM-Wrapped Cheese, leaving the particular method to be followed to the judgment of the cheese maker, AN ACID CHEESE IS VERY UNDESIRABLE BECAUSE WITH SUCH CHEESE THERE IS A TENDENCY FOR A BITTER FLAVOR TO DEVELOP ON THE SURFACE. A WELL MADE SWEET CURD IS DESIRABLE. The texture should be medium close and, therefore, a procedure should be followed to obtain this result. The salt content should be fairly high.

3. THE USE AND CARE OF CLOTHS. A special set of cloths is necessary for packing cheese in the regular hoop used for PARAFILM-Wrapped Cheese. They should be washed daily and kept immaculately clean at all times. Immediately before using they should be in a moist condition or the cheese will stick to them and make it very difficult to remove them at cutting time.

4. PACKING THE HOOPS. When the curd is ready for hooping it should be fairly well drained. A cloth must be placed in the bottom of the hoop and care must be taken in weighing and distributing the curd in the hoop so that it will be evenly filled with no light corners. With the average curd, 21 pounds and 2 ounces in a regular twenty-pound hoop will give four 5 lb. loaves of approximately the right weight for wrapping.

5. PRESSING. The first pressing should be for at least one hour to close completely the mechanical openings between the curd particles. Full pressure should be used by tightening up the jack and letting down the press.

6. CUTTING. After one hour of pressing (or when the curd is sufficiently closed) the hoops are removed from the press one at a time and the twenty pound loaf of cheese is turned out of the hoop on to a table where it can be cut conveniently. The cutting frame is placed around the cheese and a knife, which has been kept in hot water, is used to cut the four loaves. It will be found that a warm knife will slip through the curd much more easily than a cold one. In case strict net weight is required, each loaf must be placed on an accurate balance and the weight adjusted so that the finished loaf will contain slightly over the desired weight. It has been found that this excess need be not more than one ounce for the 5 lb. loaf. Experience obtained from day to day will serve as a guide as to how much tolerance should be allowed.

7. SECOND PRESSING. When all loaves have been adjusted to the proper weight they are repacked in the hoop with a cloth-covered divider between each two loaves and a cloth is placed around combined loaves so that all cut surfaces will be closed up. The hoops are returned to the press, the jack is tightened but the press is not let down. It will require three to four hours to close the surface openings completely so that the cheese will be ready for wrapping. Too much pressure at this time will cause the cloths to stick.

8. WRAPPING. When the loaves are ready to be wrapped, they are placed on a table, the cloths are removed and each loaf is wrapped separately by hand in a sheet of Parafilm, then with the paper which accompanies the Parafilm. This operation

requires skill, and speed will come only after several weeks of practice. Great care should be taken in the beginning to see that the loaf is placed in the center of the sheet of PARAFILM so that ends will meet and cover the cheese properly. When the loaves making up one hoop have been wrapped, they are placed together and enclosed in the sleeve part of the hoop with a small metal strip inserted at the break in the sleeve to prevent pinching of the paper and PARAFILM on the loaf next to it. When placed in the sleeve, the hoop is carefully forced over the outside of the sleeve and down close to the loaves. Take care to see that not too much pressure is used or the air between the cheese and the hoop will force the paper on the cheese apart and wrinkle the finished package. When the metal strip has been withdrawn and the lid placed on, the hoop is put into the press ready for the third and last pressing.

9. THIRD PRESSING. The third pressing should be for at least ten hours under the full weight of the press. The pressure, allowed to come upon the cheese by letting the press down, should be applied gradually to prevent a sudden change in the shape of the loaves as this might cause corners to break through the PARAFILM. Much care and attention should be given to this step in the operation.

PACKAGING

When the loaves are removed from the press they can be lined up in rows on the packaging table and stamped according to the laws governing the local factory. After stamping, the loaves should be inspected for flaws, appearance and weight, then placed in cartons and fibre board shipping cases. Shipping cases should not be stacked more than two high to avoid weight damage which might spread the soft cheese into an unattractive loaf.

CURING

A practical program is to have the cheese in the hands of the retailer 2 to 3 weeks after making, then sold and consumed in not over 4 weeks. It is desirable therefore to make a curd which will break down in a short time (similar to a Colby type) and to hold the cheese after making at about 50° to 60° F. A sweet type

curd is essential. Those planning a program for long-held, well-cured PARAFILM-packed cheese must be certain of their ability to produce a non-acid, sweet curd. Such a program should be built very cautiously and only after thorough experience and investigation.

SHIPPING

When the cheese is shipped it must be carefully protected against temperatures above 70° F. or below 40° F. High temperatures cause "oiling" and favors undesirable fermentations in the cheese. Low temperatures damage the cheese and cause brittleness in the PARAFILM wrapper. Similar care should be taken in the warehouse and on delivery trucks.

REMEMBER THESE PRECAUTIONS! THEY ARE ESSENTIAL TO SUCCESS WITH THE PARAFILM PACKAGE

1. HANDLE PARAFILM CAREFULLY. It can be broken or punctured easily by a finger nail or other sharp object. The slightest "break" leads to moisture loss and mold growth.
2. CONTROL CHEESE QUALITY. The package must contain high quality cheese if your business is to grow and profit. Be certain that your product is of the finest quality.
3. STORE PARAFILM CAREFULLY. PARAFILM becomes softer with increasing heat and brittle in low temperatures. Do not expose stocks to excess heat or cold. Store at temperatures between 40° F. and 70° F.
   Bundles of PARAFILM should be piled separately to avoid weight which might damage the lower sheets. Store open bundles on clean surfaces to protect against dirt particles sticking to the film. Store PARAFILM out of the direct sunlight which wrinkles the sheets.
4. HANDLE THE WRAPPED LOAF CAREFULLY. Avoid loosening of the film on the loaf. This comes from careless or repeated handling before cartoning. This leads to mold growth.
5. WATCH SHIPPING AND STORE TEMPERATURES. Cure your PARAFILM-packed cheese in temperatures not over 60° F. See that shipping temperatures do not go below 40° or higher

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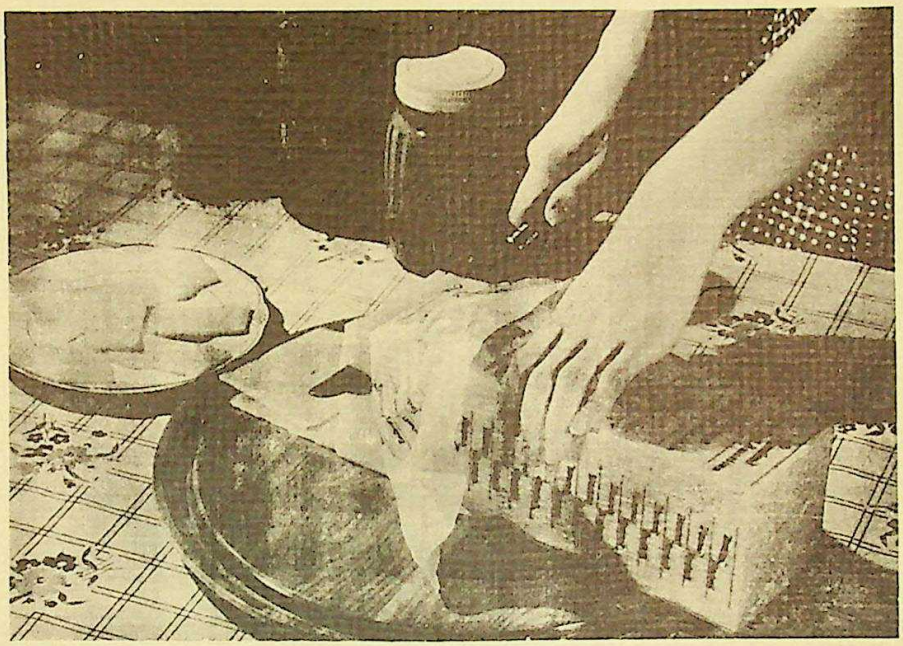

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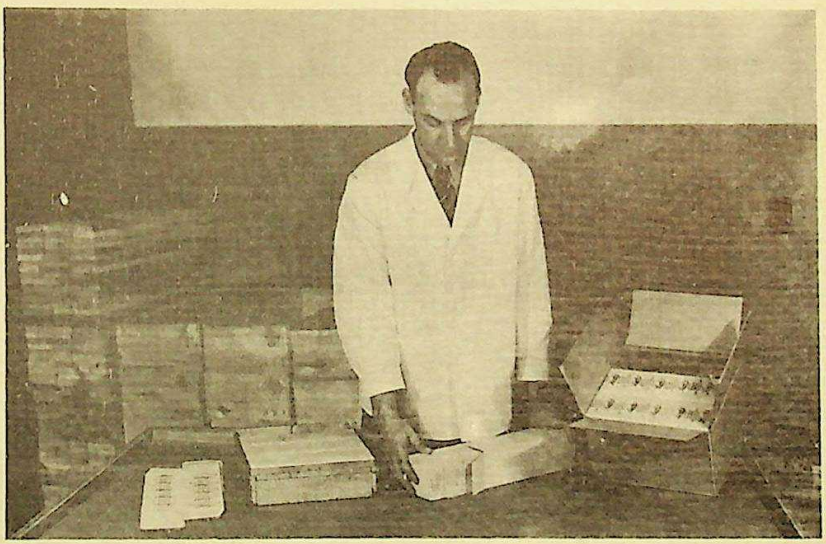

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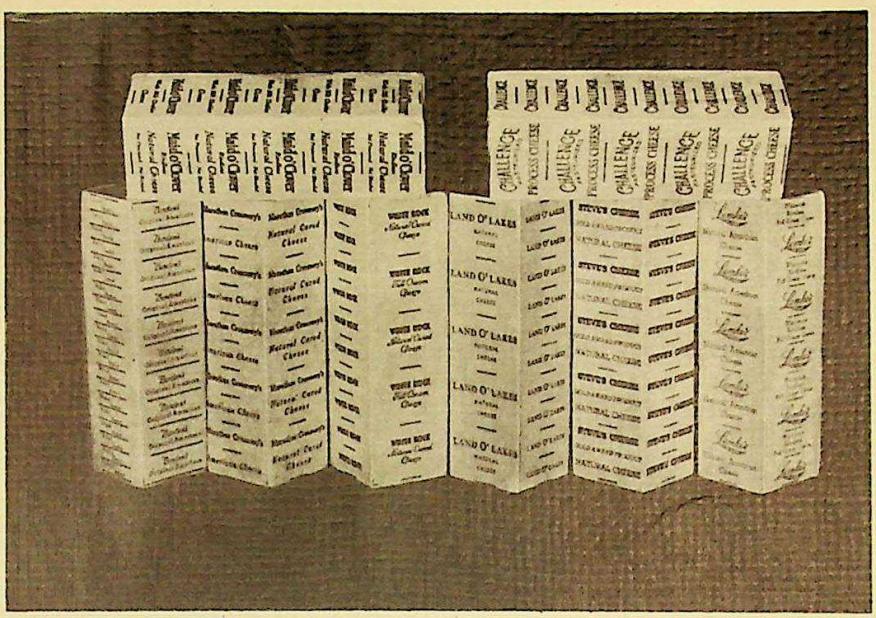

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5. WATCH SHIPPING AND STORE TEMPERATURES. Cure your PARAFILM-packed cheese in temperatures not over 60° F. See that shipping temperatures do not go below 40° or higher

than 70° F. Instruct dealers to keep and handle the finished loaf as they keep and handle butter.

6. HANDLE THE FINISHED PACKAGE CAREFULLY. When cartoned and placed in fibre containers care should be exercised to protect the containers from hard bumps and falls. Employees, truckers and your customers should be advised fully about careful treatment of the packages.

WE WILL BE GLAD TO ANSWER ANY INQUIRIES AND TO ASSIST IN ANY WAY.

THE MENASHA PRODUCTS COMPANY
MENASHA, WISCONSIN
(Division of Marathon Paper Mills Company)

PARAFILM, Trade Mark Reg. U. S. Pat. Off.---U. S. Patents No. 2,054,112; 2,054,114; 2,054,115; 2.074,313; 2,077,300.

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